# INITIAL STUDY/ DRAFT NEGATIVE DECLARATION

# Valley Christian High School Stadium Lighting

Prepared by the

City of San José

September 2004

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#### I. INTRODUCTION AND PURPOSE

This Initial Study of environmental impacts is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations §15000 *et.seq.*) and the regulations and policies of the City of San José.

This Initial Study evaluates the potential environmental impacts that might reasonably be anticipated to result from the installation of stadium lights at the Valley Christian High School football stadium.

#### Background

Currently, the Valley Christian High School football stadium is not equipped with stadium lighting. For this reason, the High School currently plays all evening football games offsite at Townsend Field in Santa Clara. The High School proposes to install a lighting system at the stadium to enable the school to hold evening events.

The existing Planned Development (PD) Zoning for the Valley Christian School site does not allow nighttime games to be played or stadium lighting to be installed on the project site. Therefore, the proposed project will require a new PD Zoning.

The project also proposes to remove two development conditions that were made requirements of the existing PD Zoning for the site, but have never been fully implemented/achieved. One of the conditions proposed to be removed pertains to the fencing of the sensitive plant species areas on the school site, and the other pertains to the school's Trip Reduction Program (TRP). The proposed PD Zoning will also include these changes, as discussed below.

The project proposes to remove the requirement to construct fencing around the plant preservation areas on the Valley Christian School site. The school's consulting biologist has stated that the rare plant populations on the campus have remained undisturbed and that fencing is not needed.

The project proposes to allow the most recent version of the Valley Christian School Trip Reduction Program (TRP) to satisfy the existing PD Zoning requirement of preparing and implementing a TRP designed to achieve a 15 percent a.m. peak hour trip reduction. The school's consulting traffic engineer prepared a Trip Reduction Program that is designed to reduce a.m. peak hour trips to the greatest extent feasible and has been implemented; however, the 15 percent goal design goal may still not be reached.

#### **Objectives**

The objective of installing stadium lighting at the Valley Christian High School football stadium is to enable the High School to host a maximum of 15 lighted evening events on their home field, including football games. This is intended to increase school spirit and student morale. In addition, the project will eliminate the need for the transportation of team members, coaches, band members, cheerleaders, etc. to the off-site home games.

The objective of not fencing the plant preservation areas located on north and south facing slopes of the Valley Christian School site is to not disrupt the natural setting.

The objective of revising the school's TRP is to change the performance standard (a 15 percent reduction in a.m. trips) to a City reviewed and approved program of trip reduction measures that will reduce a.m. trips to the greatest extent feasible.

#### II. PROJECT INFORMATION

#### A. PROJECT TITLE

Valley Christian High School Stadium Lighting

#### B. PROJECT LOCATION

Valley Christian High School is located on a 56.2-acre site in south central San José. Valley Christian High School lies along the ridgeline that is west of Diamond Heights Drive and south of Senter Road. The project proposes to install lighting at the football stadium, which is located at the eastern side of the campus at the crest of the ridgeline. Direct access to the site is provided by Skyway Drive. A regional and vicinity map of the project site are shown on the following pages.

#### C. LEAD AGENCY NAME AND ADDRESS

City of San José Department of Planning, Building and Code Enforcement 801 North First Street, Room 400 San José, CA 95110

#### D. CONTACT PERSON AND TELEPHONE NUMBER

Akoni Danielson, Principal Planner, 277-4576

#### E. PROPERTY OWNER'S NAME AND ADDRESS

Valley Christian High School 100 Skyway Drive San José, CA 95111

#### F. ASSESSOR'S PARCEL NUMBERS

684-05-004	684-05-014
684-05-005	684-05-015
684-05-010	684-05-016
684-05-012	

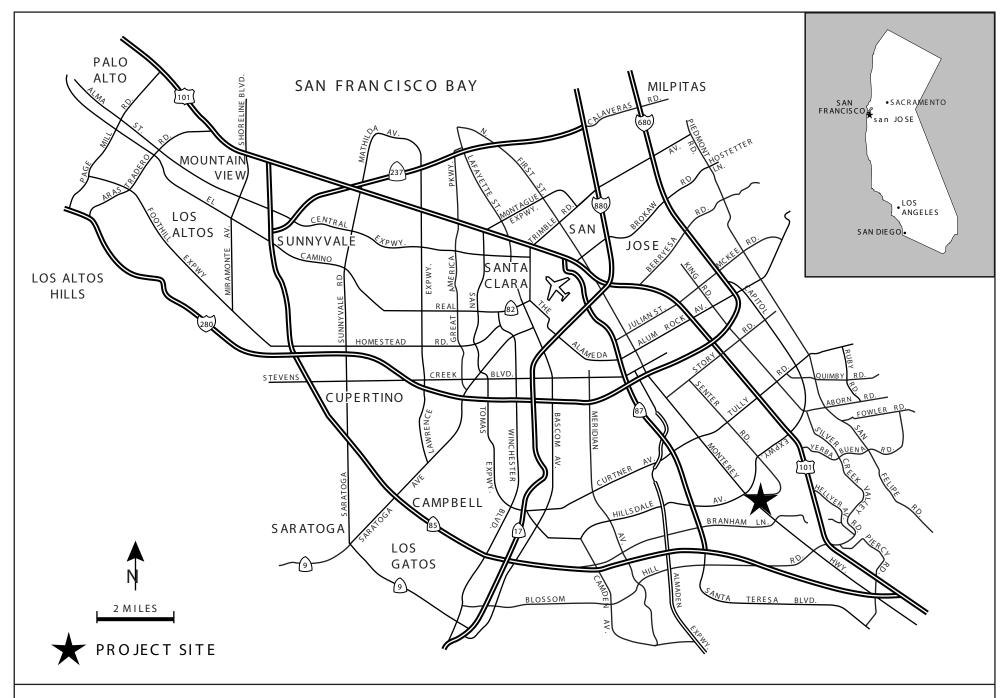
#### G. ZONING AND GENERAL PLAN DESIGNATION

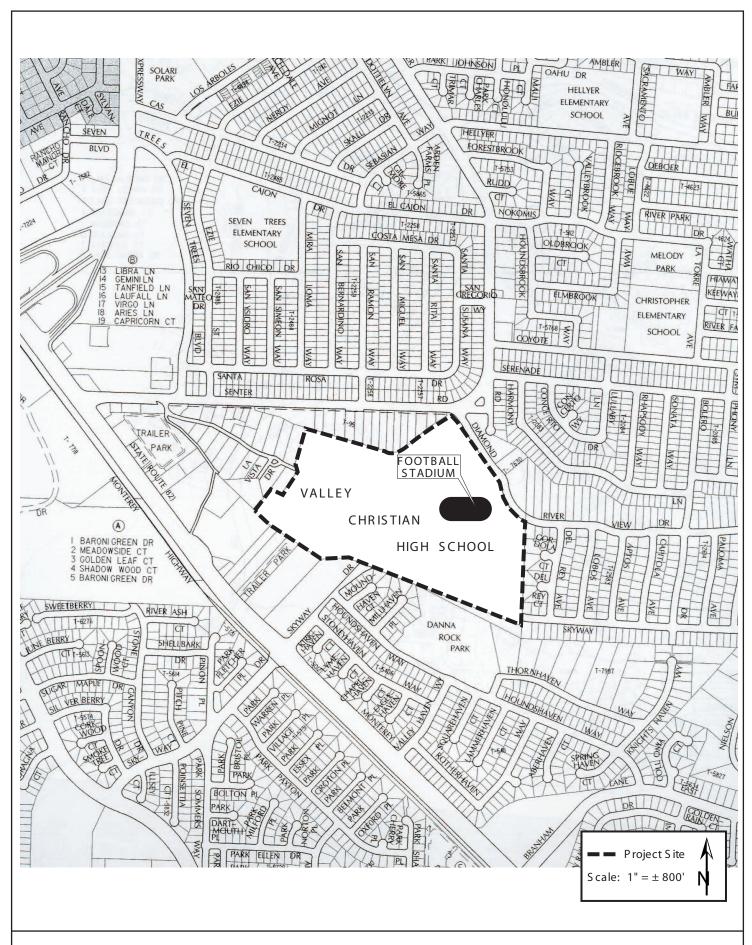
Zoning:

■ Planned Development A(PD) Zoning

General Plan Designation:

Very Low Density Residential (2 du/ac)





VICINITY MAP FIGURE 2

# III. PROJECT DESCRIPTION

Valley Christian High School proposes to install stadium lights at the football/track stadium located on the eastern side of the campus. With the stadium lighting, Valley Christian High School proposes to host a maximum of 15 evening events per year, with five to seven of these events being football games. The games will generally be played on Friday evenings at 5:00 p.m. for the Junior Varsity and 7:30 p.m. for the Varsity. The games typically end around 9:30 p.m. The lights will be turned off by 10:00 p.m. for all events. The maximum capacity of the Valley Christian High School football stadium is approximately 3,500, although most varsity games average approximately 1,700 spectators in attendance. The football games will attract the most people to the stadium. Although most other evening events held at the stadium will be much smaller than football games (e.g., soccer matches), it is possible that other large events (e.g., graduation ceremonies) could also occur.

For the purpose of this Initial Study and the requested Planned Development Zoning, it is proposed that the football stadium will be used for a maximum of 15 evening events, with varying attendance and activity levels.

Lighting of the stadium will be accomplished with four light racks (two on each side of the stadium) that will be elevated above the field by single poles, and connected by underground electrical conduit. The light racks on the south side of the field will be located on each side of the existing 30-foot tall bleachers and will be elevated 80 feet above the field. The two light racks on the north side of the stadium will be elevated 60 feet above the field. The northwesterly light pole will be 60 feet tall and located at grade with the playing field in an existing storage area. The base of the northeasterly light pole will be located approximately 30 feet below the grade of the field, adjacent to the base of an existing retaining wall. This light pole will be 90 feet tall in order to elevate the light rack 60 feet above the field. The lights on both the north and south sides of the field will be installed in areas that were previously graded during the construction of the stadium.

The diameters of the poles vary according to the height of the pole. The 60-foot pole will have a 15-inch diameter base that will taper to a seven-inch diameter top. The 80 and 90-foot poles will have a 21.5-inch base that will taper to an approximately nine and one-half inch top. A schematic stadium lighting plan is presented as Figure 3.

The proposed stadium lighting fixtures will use the latest technology in high wattage lamps. Each fixture has an aluminum reflector, light hood, and an aluminum visor to direct light onto the field and thereby reduce the amount of spill light generated (described in Section IV., A., Aesthetics). The fixtures will be equipped with 2000-watt metal halide lamps. These high power lamps will reduce the amount of fixtures needed and increase light beam control and efficiency, thereby reducing the size of the light racks and further minimizing the amount of spill light onto adjacent land uses.

#### **Plant Preservation Areas**

During prior development of the school, a relocation area for a special status plant species (Santa Clara County Dudleya) and two plant preservation areas were established on the approximate 62-acre school site. A chain link fence was installed around the dudleya relocation area located on the north side of the campus (refer to Figure 13). The existing Planned Development Zoning for the Valley Christian School site also requires that fencing and signage be placed around the plant preservation areas on the site, for the purpose of protecting the plants. The placement of fencing and signage around the plant preservation areas was not completed. The location of the plant preservation areas are shown on Figure 13. Annual plant monitoring on the site indicates that the plant preservation

areas are undisturbed and that fencing is not needed, due to the location of these areas on relatively steep, rocky, slopes that are not readily accessible. The fencing is considered unnecessary to preserve the plant health and would detract from the natural setting of the plant preservation areas. Therefore, the project proposes to remove the existing PD Zoning requirement to install fencing and signage around the two existing plant preservation areas on the site.

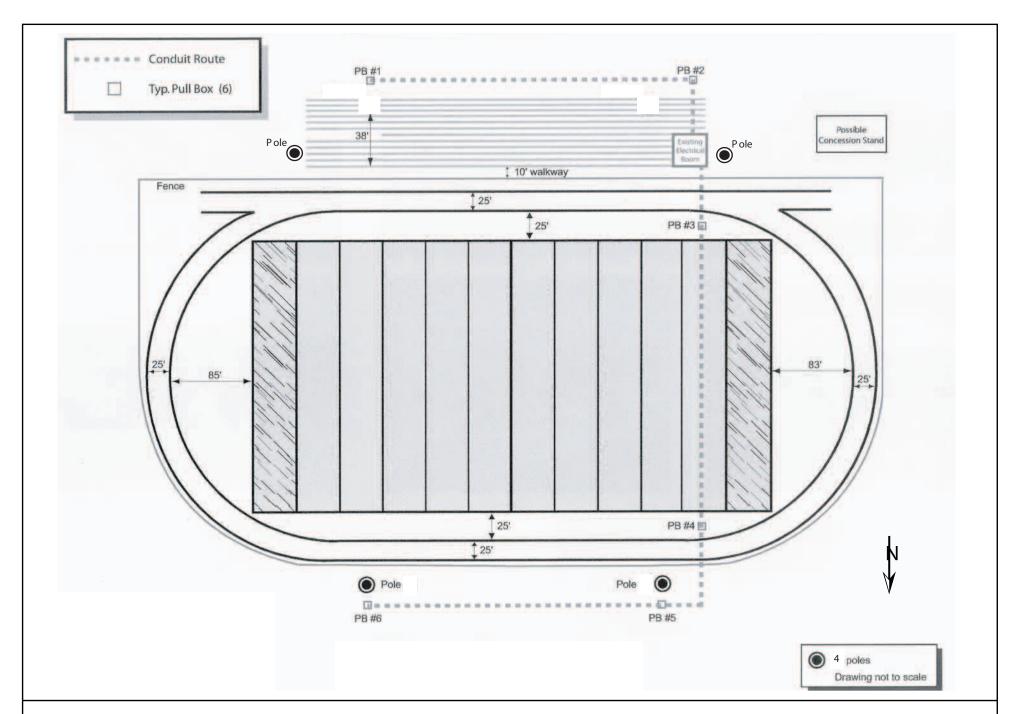
#### **Trip Reduction Plan**

As a condition of approval for prior development on the Valley Christian campus, the City of San Jose required a Trip Reduction Program (TRP) to reduce the number of trips accessing the Valley Christian School campus. This condition was not required as mitigation to reduce any significant traffic impact to a less than significant level, but rather to reduce the effect campus traffic has during weekday morning. The condition of approval reads, "The applicant shall submit to the Director of Planning a Trip Reduction Program designated to achieve a 15 percent reduction in a.m. peak hour trips. This program may include car-pooling, van-pooling, busing or other measures to reduce a.m. peak hour trips and shall include baseline measurements and a monitoring program."

The project proposes to have the 15 percent trip reduction condition removed and implement a revised TRP. Valley Christian School has implemented and enforced various trip reduction measures since implementation of the TRP prepared in May 2002. Monitoring of the trip reduction efforts has shown a year to year (and even month to month) variation in the trip reduction achieved at the school, with the results ranging from 2.4 to 9.5 percent reduction in a.m. trips. It is the professional opinion of the consulting traffic engineer that it is unlikely that a 15 percent reduction in a.m. peak hour trips can be achieved<sup>1</sup>. In addition, public use of the campus swimming pool on weekday mornings has increased, further increasing non-school related trips. Therefore, a revised TRP has been prepared to fulfill the condition of approval stated above. This program will hold Valley Christian accountable to the City of San Jose for providing programs that will reduce the number of trips accessing the campus from Skyway Drive during the morning peak hour and will continue to be monitored on a yearly basis to the satisfaction of the Director of Planning, Building and Code Enforcement and the Director of Public Works.

City of San José

<sup>&</sup>lt;sup>1</sup> Fehr & Peers Associates, Inc, Transportation Consultants, Valley Christian Schools Trip Reduction Program Skyway Campus, May 2004.



#### IV. ENVIRONMENTAL SETTING & CHECKLIST

This section will describe the existing environmental conditions on and near the project site, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, was used to identify environmental impacts that could occur if the proposed project is implemented. The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of the checklist. This section identifies the impacts that might result from the proposed project, explains the answers to checklist questions, and addresses mitigation measures that are proposed to reduce or avoid significant impacts.

#### A. AESTHETICS

The following discussion is based in part upon technical information prepared by the High School's lighting consultant, *Athletic Recreation Services*. A copy of the technical information is presented in Appendix A of this Initial Study.

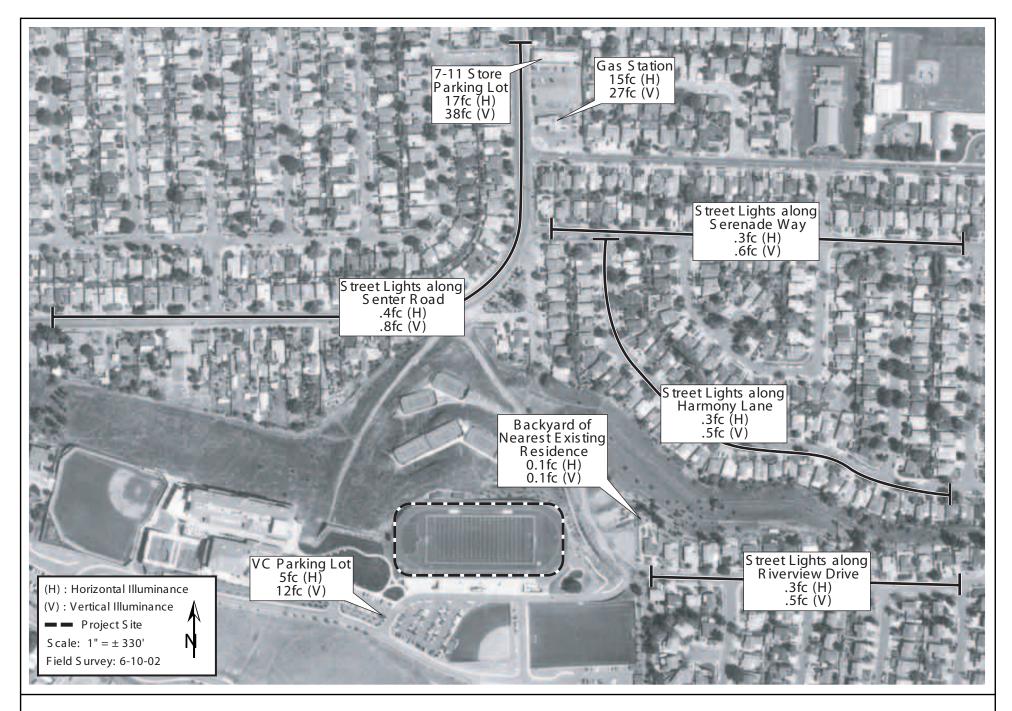
# 1. Setting

Valley Christian High School is located on top of a hill overlooking primarily residential areas to the north, east, south and west. The football stadium is located on the eastern side of the campus. The nearest existing residence to the stadium is located at the end of Riverview Drive and is approximately 350 feet east of the eastern edge of the football field.

The Valley Christian School site is developed with classrooms and ancillary uses such as a gymnasium, playing fields, parking lots, tennis courts and the football stadium/locker room facilities. The stadium bleacher/locker room facilities are located along the south side of the football field. The stadium bleacher stands are 30 feet tall. Due to the project's location on top of a hill and the lack of mature trees, the existing school campus is highly visible from a wide area. Security and parking lot lights illuminate large portions of the campus including the bleachers, classrooms, gymnasium, and parking lots, making the campus also highly visible at night.

The following discussion of existing light levels in the project area is based on ambient light level measurements taken by the High School's lighting consultant, *Athletic Recreation Services*, on the night of July 10, 2002. The readings on Figure 4 represent the horizontal illuminance at various locations surrounding the project site. Horizontal illuminance is defined as the spill light measured at 3.0 feet above the ground surface at a given distance from the light source. All light level measurements are measured in "footcandles". A footcandle (fc) is one lumen of uniform illuminance over an area of one square foot. For comparison purposes, light from a full moon alone typically produces 0.50 fc of light.

The streetlights along Riverview Drive, Harmony Lane and Serenade Way generate a horizontal illuminance of 0.3 fc and the streetlights along Senter Road were measured at 0.4 fc. The lights at the school parking lot adjacent to the stadium were measured at 5 fc and the parking lot lights at the 7-11 store located near the intersection of Senter Road and Coyote Road were measured at 17 fc. The existing light level in the backyard of the nearest existing residence (i.e., end of Riverview Drive) and the residential lots east of the stadium along Diamond Heights Drive is approximately 0.10 fc.



#### 2. Environmental Checklist and Discussion

AE	AESTHETICS							
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated		No Impact	Beneficial Impact	Information Source(s)	
Wo	ould the project:							
1)	Have a substantial adverse effect on a scenic vista?			$\boxtimes$			1,2	
2)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state						1,2	
3)	scenic highway? Substantially degrade the existing visual character or quality of the						1,2,10	
4)	site and its surroundings? Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?						1,10	

**Discussion:** The proposed project will alter daytime and nighttime views of the project site and increase existing light levels in the project area, due to the construction of the lighting system and the introduction of lighted evening events to a site where this has not previously occurred. The light racks on the south side of the stadium will be elevated 80 feet above the field and light racks on the north side of the stadium will be 60 feet above the field.

The lighting system proposed by the project includes several features to reduce the visibility and the amount of spill light generated by the project<sup>2</sup>. The proposed stadium lighting fixtures include light visors and light hoods that direct the light down onto the field and minimize the amount of spill light onto the adjacent land uses. These same features also restrict a person from seeing the arc tube, or brightest component of the light. The fixtures will be equipped with 2000-watt metal halide lamps. These high power lamps reduce the amount of fixtures needed and increase light beam control and efficiency, thereby reducing the size of the light racks and further minimizing the visibility of the lighting system and the amount of spill light onto the adjacent land uses.

#### Spill Light from the Proposed Project

The proposed stadium lighting project is intended to provide a sufficient light source for players and fans to safely enjoy evening sporting events at the stadium. The proposed lighting system will provide an average maintained light level of 53 fc on the playing field<sup>3</sup>.

10

<sup>&</sup>lt;sup>2</sup> Spill light is any light where it is unintended or unwanted.

<sup>&</sup>lt;sup>3</sup> "Maintained Footcandles" is the term used to describe the light level that a lamp is expected to provide over the long-term, after there is a loss of light due to dirt accumulation on the reflector and lens, and a loss of lamp output. For comparison, "Initial Footcandles" is the term used for the amount of light measured after only 100 hours of lamp operation and is generally 20% higher than the maintained footcandles. This is the amount of light that can be expected immediately after installation of the proposed lighting.

As stated previously, the proposed stadium lighting includes many features to reduce spill light such as light visors and hoods. An example of how spill light is minimized by the lights is shown on Figure 5 on the following page.

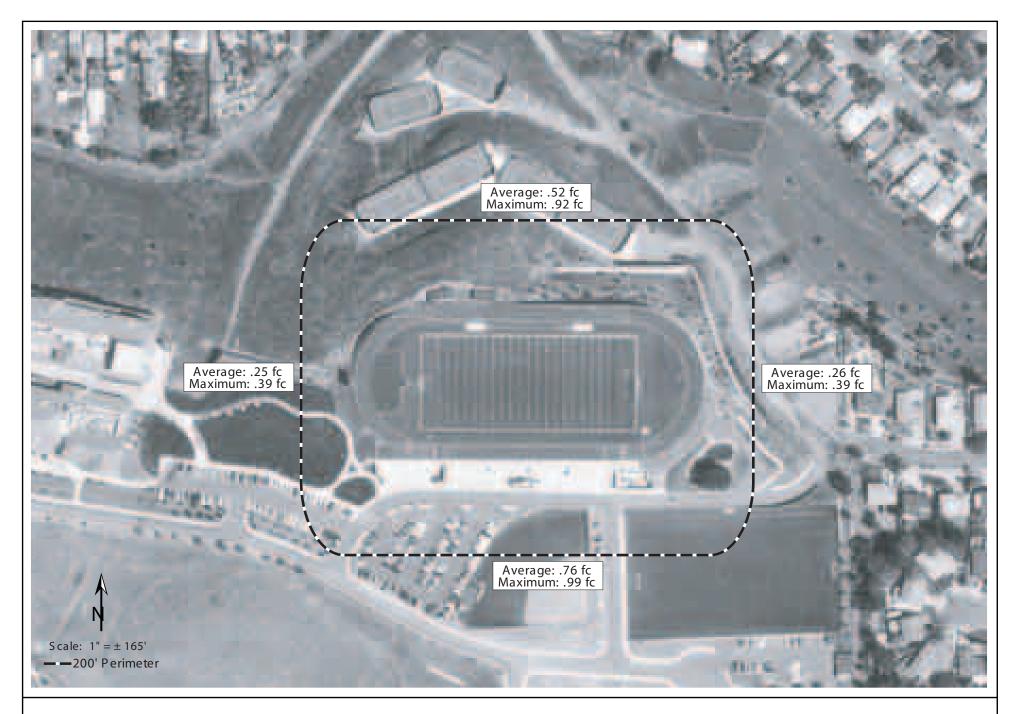
In order to evaluate the potential for the spill light from the stadium lighting project to result in significant visual impacts, the projected initial spill light levels were calculated for two scenarios: horizontal illuminance (light measured at 3.0 feet above the ground surface) and maximum illuminance. Maximum illuminance is the spill light measured by a light meter measuring the highest light level when aimed directly at the light source. Future projected spill light levels were calculated for a series of locations that were 200 feet from the perimeter of the playing field. Figure 6 illustrates the locations of the light level calculations and the initial horizontal spill light levels that can be anticipated at the locations. Figure 7 illustrates the initial maximum spill light levels that can be anticipated at these same locations.

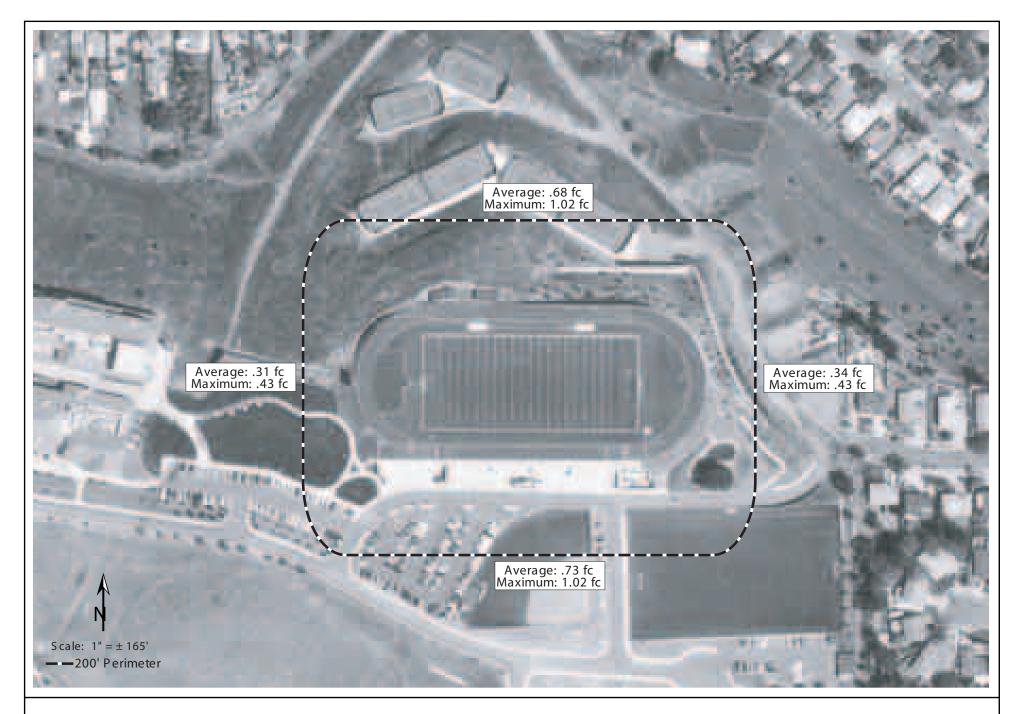
The initial horizontal illuminance projected for 200 feet from the perimeter of the playing field are as follows: to the east projections ranged from 0.14 fc to 0.39 fc, with an average of 0.26 fc; to the south projections ranged from 0.30 fc to 0.99 fc, with an average of 0.76 fc; to the west projections ranged from 0.12 fc to 0.39 fc, with an average of 0.25 fc; and to the north projections ranged from 0.13 fc to 0.92 fc, with an average of 0.52 fc.

The initial horizontal illuminance projected for the nearest planned residences to the football stadium (lots along east side of Diamond Heights Drive), located approximately 200 feet east of the eastern edge of the playing field, will be approximately 0.26 fc. The initial horizontal illuminance projected for the nearest existing residences to the football stadium (i.e., end of Riverview Drive), located approximately 350 feet east of the eastern edge of the playing field, will be less than 0.25 fc. For comparison purposes, light from a full moon alone typically produces 0.50 fc of light. The spill light onto uses farther from the field (e.g., along Senter Road or Skyway Drive) will be substantially less than the spill light described above for the nearest uses to the east.

Given the distance of the nearest existing and planned residences (approximately 350 feet and 200 feet east from the eastern edge of the football field, respectively) and the functionality of the highly focused beam of the lighting system proposed by the project, the stadium lights will project a lesser amount of light onto the nearest adjacent existing and planned residences than a full moon. In addition, the stadium lights will be used a maximum of 15 evenings per year and will be turned off by 10:00 p.m. for all events. Due to the minimal amount of spill light reaching the nearest residence and the limited frequency and duration of the evening stadium events, the project-generated light levels are not expected to result in a significant spill light impact to the surrounding land uses.







# **Lick Observatory**

In recent years, the amount of light produced in the Bay Area has been a growing concern for the Lick Observatory, located atop Mount Hamilton east of San Jose. The telescope at the observatory is used from sunset to sunrise every day of the year except Christmas and New Years Day. The observatory was contacted and informed of the proposed project. Due to the frequency and duration of the proposed evening events, the observatory did not feel the project will interfere with their operations<sup>4</sup>. The following guidelines are recommended by the Lick Observatory for lighting in the Santa Clara Valley<sup>5</sup>:

- Use of Low Pressure Sodium (LPS) for the majority of street lighting, as well as use of LPS lighting in public and private development parking lots.
- Use of mixed lighting for areas heavily traveled by pedestrians.
- Use of the minimum amount of lighting needed for the intended purpose.
- Use of lighting controls, such as timers and dimmers, so lighting is not used when not needed.
- Control of emitted light by fixture choice, by shielding, and by placement so light is directed to the ground and not the sky.

The lighting proposed by the project is not excessive. According to the Illuminating Engineering Society of North America (IESNA), a high school facility with spectator capacity under 5,000 is considered a Class II facility<sup>6</sup>. The estimated seating capacity of the permanent bleachers at the Valley Christian High School football stadium is 3,500 people and, therefore, it is best described as a Class II facility. The IESNA recommends an average light level of 50 maintained footcandles for a football field at a Class II facility, which is the current standard for high school football stadiums. The proposed project is designed to provide an average maintained illuminance of 53 footcandles.

The lights will be used a maximum of 15 evenings per year and will be turned off by 10:00 p.m. The fixtures are designed to produce a focused beam, and the lights will be shielded and angled down towards the ground. For these reasons the proposed lighting is consistent with the recommendations of the Lick Observatory.

#### City of San Jose Lighting Policy

The purpose of the City of San Jose Lighting Policy (included as Appendix B) is to promote energy-efficient outdoor lighting on private development that provides adequate light for nighttime activities while benefiting the continued enjoyment of the night sky and continuing operation of the Lick Observatory by reducing light pollution and sky glow.

The policy states that the use of low-pressure sodium (LPS) lighting for outdoor, unroofed areas shall be required for all private development in the City of San Jose as a condition of approval on all Land Use Permits.

There are, however, exceptions to the LPS requirement of the lighting policy. Outdoor recreation facilities such as the proposed stadium lighting project are one of the exceptions.

Valley Christian High School Stadium Lighting

<sup>&</sup>lt;sup>4</sup> Phone Communication, Bert Jones, Assistant Professor, Mount Hamilton Observatory, July 1, 2002 and May 15, 2003

<sup>&</sup>lt;sup>5</sup> University of California/Lick Observatories, http://www.ucolick.org, May 15, 2003.

<sup>&</sup>lt;sup>6</sup> Illuminating Engineering Society of North America, *Recommended Practice for Sports and Recreational Lighting*, 2001

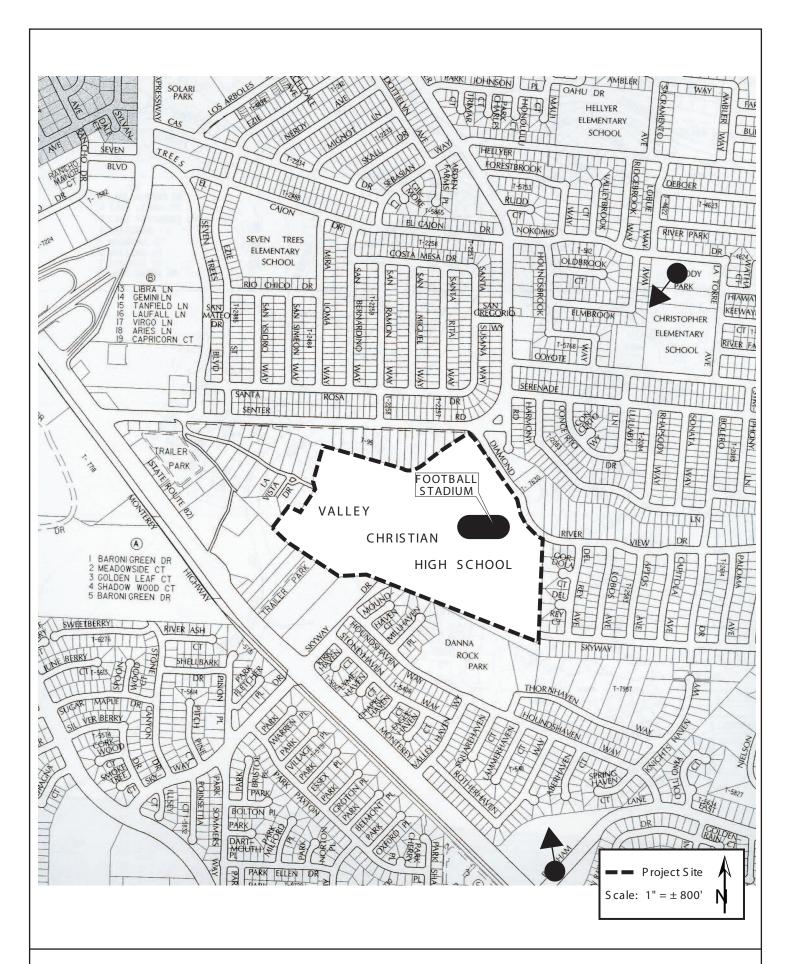
The policy states that for field sports such as football, baseball, softball, or soccer, partially shielded light fixtures may be used during such recreational events. The lighting for the outdoor recreation activity must be extinguished by 11:00 p.m. or when the activity is concluded, but only if the event began before 10:00 p.m. All exceptions shall require a photometric study of the proposed lighting, a referral to the Lick Observatory, and must be the subject of a public hearing.

The project is proposing a high quality partially shielded lighting system that is designed to focus the beam on the playing surface and minimize the amount of light escaping into the sky or onto adjacent uses. A photometric study was prepared for the proposed lighting system, and is included as Appendix A of this Initial Study. The projected spill light levels are not expected to result in a significant impact. The Lick Observatory was contacted and informed of the proposed project. Due to the frequency and duration of the proposed evening events, the observatory did not feel the project will interfere with the observatory's operations. The proposed project also conforms to the observatory's recommended guidelines for outdoor lighting in the Santa Clara Valley. The proposed project will be the subject of a public hearing during the approval process. Therefore, the proposed project is consistent with the City of San Jose Lighting Policy.

#### **Views of the Proposed Project**

The proposed project is located on top of a developed hill that is highly visible from the surrounding area during the day and night. The elevated light racks will be substantially taller than any other structure on the Valley Christian School site and, as a result, will be visible from the surrounding area during the day and during the evening when in use. Existing conceptual daytime and nighttime views of the proposed stadium lights are shown on Figures 8 through 12 with a map showing from where the photos were taken. The evening photos were taken at dusk to provide a better view of the project area. As shown in Figures 8 through 12, the poles, light racks, and lit field will be visible from different vantage points. It should be noted, however, that from close up (at the bottom of the hill) all of the lights will not be visible. The photos also show that there are existing structures on the project site that are visible during the day including the classroom and gymnasium buildings, bleachers, goal posts, score board, parking lot lights, and street lights. Many of these structures are also illuminated and visible during the evening, due to the existing security, parking lot, and street lighting on the site. As shown in the photos, the stadium lighting will be one more source of light in a developed area of South San Jose. Since the lights are proposed on a developed site that is already illuminated and highly visible both during the day and night, the project represents an incremental increase in the amount of development and light on the Valley Christian High School site.

Although the proposed stadium lighting will affect daytime and nighttime views of the site from the project area, the proposed project is located on a large school campus that is visible during the day and already well lit during the evening. The school is located in an urban area that already has relatively high levels of ambient light. In addition, the proposed stadium lighting will only be used for a maximum of 15 events during the year between the hours of 5:00 p.m. and 10:00 p.m.. Given the existing developed conditions on the project site and due to the limited duration and infrequency of the proposed 15 evening stadium events per year, the proposed project is not expected to substantially degrade daytime or nighttime views in the project area or substantially degrade the existing visual character or quality of the site and its surroundings.





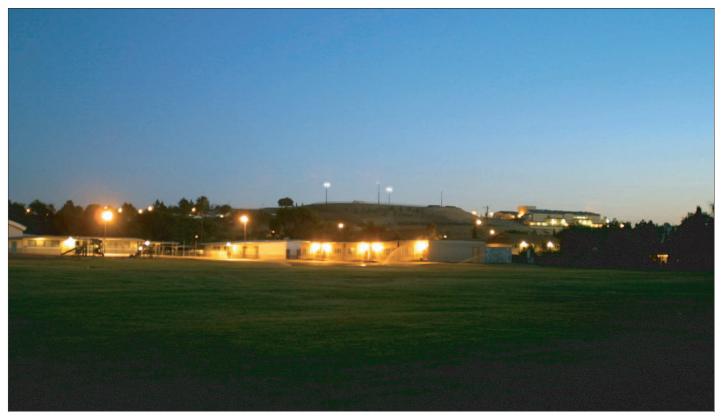
Existing daytime view looking southwest from Melody Park, on Nokomis Drive.



Proposed daytime view looking southwest from Melody Park, on Nokomis Drive.



Existing nighttime view looking southwest from Melody Park, on Nokomis Drive.



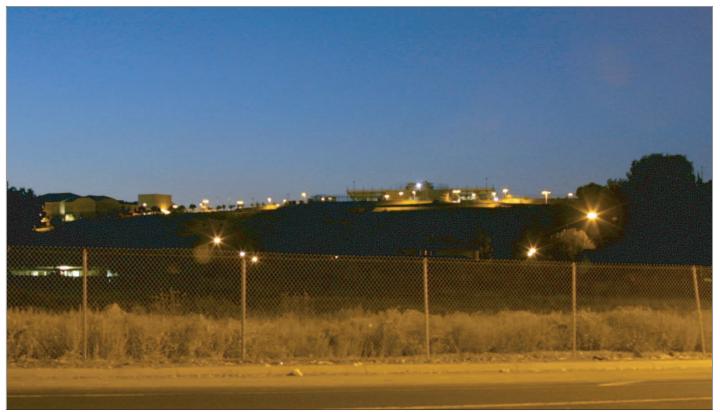
Proposed nighttime view looking southwest from Melody Park, on Nokomis Drive.



Existing daytime view looking north from Branham Lane East, just east of Highway 82 (Monterey Road).



Proposed daytime view looking north from Branham Lane East, just east of Highway 82 (Monterey Road).



Existing nighttime view looking north from Branham Lane East, just east of Highway 82 (Monterey Road).



Proposed nighttime view looking north from Branham Lane East, just east of Highway 82 (Monterey Road).

There is the potential for reflective surfaces of the lighting racks and fixtures to be a source of glare during the day. This glare may adversely affect daytime views in the project area.

**Impact:** The reflective surfaces of the lighting racks and fixtures may be a source of glare during the day and adversely affect daytime views in the project area.

**Mitigation and Avoidance:** The following mitigation measure will minimize the glare from the light racks:

• The light racks and fixtures will be painted a non-reflective color.

# 3. <u>Conclusion</u>

With inclusion of the above described mitigation measure, the proposed project will have a less than significant adverse aesthetic impact. (Less Than Significant Impact With Mitigation)

# B. AGRICULTURAL RESOURCES

# 1. Setting

Valley Christian High School is located in a residential area within the City of San Jose. The site is not designated by the California Resources Agency as Farmland of any type, and is not the subject of a Williamson Act contract. There is no property used for agricultural purposes adjacent to the project site.

#### 2. Environmental Checklist and Discussion

AGRICULTURAL RESOURCES							
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)	
Would the project:							
1) Convert Prime Farmland, Unique				$\boxtimes$		3	
Farmland, or Farmland of Statewide							
Importance (Farmland), as shown on							
the maps prepared pursuant to the							
Farmland Mapping and Monitoring Program of the California Resources							
Agency, to non-agricultural use?							
2) Conflict with existing zoning for				$\boxtimes$		3	
agricultural use, or a Williamson							
Act contract?							
3) Involve other changes in the				$\boxtimes$		1	
existing environment which, due							
to their location or nature, could							
result in conversion of Farmland,							
to non-agricultural use?							

#### 3. Conclusion

The project will have no impact on agricultural land or agricultural activities. (No Impact)

# C. AIR QUALITY

#### 1. Setting

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determination of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine.

Northwest winds and northerly winds are most common in San Jose, reflecting the orientation of the Bay and San Francisco peninsula. Winds from these directions carry pollutants released by autos and factories from upwind areas of the peninsula towards San Jose, particularly during the summer months. Vertical mixing and dilution of pollutants is often suppressed by inversion conditions, when a warm layer of air traps cooler air close to the surface. While San Jose is mostly flat, the larger south bay sub-air basin has significant terrain features that affect air quality. The Santa Cruz Mountains and Hayward Hills on either sides of the south bay tend to restrict horizontal dilution, and this alignment of terrain also channels the winds from north to south. The combined effects of moderate ventilation, frequent inversions that restrict vertical dilution, and terrain that restricts horizontal dilution give San Jose a relatively high atmospheric potential for pollution.

The Bay Area Air Quality Management District (BAAQMD) is the local agency authorized to regulate stationary air quality sources in the Bay Area. The BAAQMD develops and enforces air quality regulations for non-vehicular sources, issues permits, participates in air quality planning, and operates a regional air quality monitoring network. The nearest monitoring facility to the site is in downtown San Jose, on 4th Street. Exceedances of the state and federal standards at this station include ozone levels above the state and federal standard, and PM10 levels above the state standard. Both ozone and PM10 are considered regional pollutants, in that concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region.

The Federal Clean Air Act and the California Clean Air Act of 1988 require that the State Air Resources Board, based on air quality monitoring data, designate portions of the state where the federal or state ambient air quality standards are not met as "nonattainment area". Because of the differences between the federal and state standards, the designation of nonattainment areas is different under the state and federal legislation. Under the California Clean Air Act, Santa Clara County is a nonattainment area for ozone and PM10. The County is either in attainment or unclassified for other pollutants.

The Bay Area Air Quality Management District defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to located. These land uses include residences, schools playgrounds, childcare centers, retirement homes, convalescent homes, hospitals and medical clinics. The existing students at the Valley Christian Schools and the residential areas near the site are considered the closest sensitive receptors to the project.

#### 2. Environmental Checklist and Discussion

ΑI	R QUALITY						
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Impact	No Impact	Beneficial Impact	Information Source(s)
Wo	ould the project:						
1)	Conflict with or obstruct				$\boxtimes$		1,5
	implementation of the applicable air						
2)	quality plan? Violate any air quality standard or			$\bowtie$			5
2)	contribute substantially to an		Ш		Ш	Ш	3
	existing or projected air quality						
	violation?						_
3)	Result in a cumulatively considerable net increase of any		Ш	$\boxtimes$	Ш		5
	criteria pollutant for which the						
	project region is classified as non-						
	attainment under an applicable						
	federal or state ambient air quality standard including releasing						
	emissions which exceed						
	quantitative thresholds for ozone						
	precursors?						_
4)	Expose sensitive receptors to substantial pollutant concentrations?				Ш	Ш	5
5)	Create objectionable odors affecting a substantial number of people?						1,5

**Discussion:** The Bay Area Air Quality Management District (BAAQMD) has established thresholds for determining whether a given project has the potential for significant air quality impacts. If a project exceeds the thresholds, detailed air quality analyses are usually required, as well as review of the project by BAAQMD staff. If a project does not exceed the thresholds, it is typically assumed to have a less than significant impact upon air quality.

The BAAQMD generally does not recommend a detailed air quality analysis for projects generating less than 2,000 vehicle trips per day. The proposed project will not generate any new vehicle trips that could cause air quality impacts. In many cases, the proposed project will reduce vehicle miles traveled. Existing home night games are currently played at Townsend Field in Santa Clara. This results in Valley Christian students, players, coaches, bandmembers, cheerleaders, and spectators traveling to home night games in Santa Clara. With the proposed project, many students, players, coaches, bandmembers, and cheerleaders will remain on campus until the game, thereby not generating any vehicle trips. All vehicle trips made to Valley Christian would be replacing trips that are currently made to Townsend Field and, therefore, would not be net new trips. For these reasons, the project will generate substantially less than 2,000 net new vehicle trips, and it is concluded that project generated traffic will not result in a significant air quality impact.

The proposed project will result in approximately 30 diesel bus trips per day to and from the stadium on up to 15 evenings per year. This would not result in a significant air quality impact.

Driving and parking on unpaved lots has the potential to generate dust. As discussed in Section IV., H., Hydrology and Water Quality, gravel will be placed on the unpaved church building pad lot prior to its use as an overflow parking lot. All other parking areas will be paved. The gravel will reduce dust generation from parking and driving on unpaved lots to a less than significant level.

#### **Construction Impacts**

Construction dust could affect local air quality at various times during construction of the project. The dry, windy climate of the area during the summer months creates a high potential for dust generation when and if underlying soils are exposed to the atmosphere.

The effects of construction activities will be increased dustfall and locally elevated levels of PM10 downwind of construction activity. Construction dust has the potential for creating a nuisance at nearby properties. This impact is considered potentially significant.

The proposed project will not create any objectionable odors.

**Impact:** Construction of the proposed project could result in significant short-term air quality impacts associated with dust generation.

**Mitigation and Avoidance:** The BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to a level that is less than significant. The following construction practices will be implemented by the proposed project as applicable:

- Water all active construction areas at least twice daily or as often as needed to control
  dust emissions
- Cover all trucks hauling soil, sand, or other loose materials and/or ensure that all trucks hauling such materials maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites.
- Sweep daily, or as often as needed, with water sweepers all paved access roads, parking areas and staging areas at construction sites.
- Sweep public streets daily, or as often as needed, with water sweepers to keep streets free of visible soil material.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.) sufficient to prevent visible airborne dust.

- Limit traffic speeds on unpaved roads to 15mph.
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

#### 3. <u>Conclusion</u>

With incorporation of the mitigation measures identified above, the proposed project will not result in significant air quality impacts. (Less Than Significant Impact With Mitigation)

#### D. BIOLOGICAL RESOURCES

The following discussion is based upon previous biological studies performed on the project site by *Jones & Stokes Associates, Inc.*, *H.T. Harvey & Associates, Inc.*, and a memo from *Environmental Science Associates*. The studies are on file at the City of San José Department of Planning, Building and Code Enforcement. The memo is included as Appendix C of this Initial Study.

#### 1. Setting

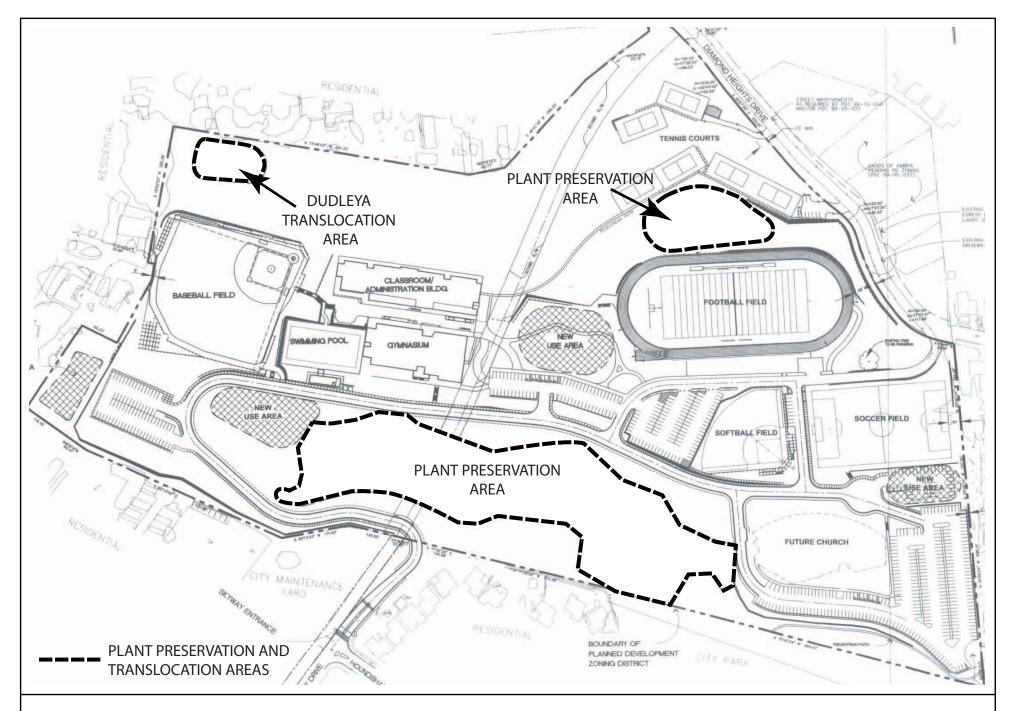
The football stadium and the areas adjacent to the stadium to the south and west are completely developed with parking lots and playing fields. The hillside area bordering the stadium to the north and east is mostly undeveloped and contains non-native annual grassland and ruderal habitat, except for several tennis courts and areas where retaining walls were constructed. Serpentine rock outcrops and soils are present on the site and in the vicinity.

# **Special Status Plants and Animals**

There are several sensitive plant and animal species that are known to occur on serpentine soils and rock outcrops in the area. Special status plant and animal surveys have been conducted on the Valley Christian School site since 1991. As a result of the surveys, the Santa Clara dudleya and the Metcalf Canyon jewel flower are known to occur on the site. No other special status plant or animal species are expected to be present on the site.

During prior development of the school, dudleya were relocated and two plant preservation areas were established on the approximate 62-acre school site. The plant preservation area located closest to the proposed project is located approximately 25 yards north of the football stadium on a steep natural slope between the football field and the tennis courts (refer to Figure 13).

A chain link fence was installed around the dudleya relocation area, located in the northwest corner of the campus (refer to Figure 13). The existing Planned Development Zoning for the Valley Christian School Site also requires that fencing and signage be placed around the plant preservation areas on the site for the purpose of protecting the plants. The placement of fencing and signage around the plant preservation areas has not been completed. A plan showing the location of the fenced dudleya relocation area and the plant preservation areas is shown on the following page.



# 2. Environmental Checklist and Discussion

BI	OLOGICAL RESOURCES						
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Wo	ould the project:						
1)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or						1,2,8,
2)	U.S. Fish and Wildlife Service? Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife						1
3)	Service? Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological						1
4)	interruption, or other means? Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?						1
5)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation						1,2
6)	policy or ordinance? Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?						1

**Discussion:** Valley Christian High School proposes to install stadium lights at the football/track stadium located on the eastern side of the campus. Lighting of the stadium will be accomplished with four light racks (two on each side of the stadium) that will be elevated above the field by poles and connected by underground electrical conduit. The light racks on the south side of the stadium will be mounted in developed areas on each side of the existing bleachers, and therefore, will not impact biological resources. The base of the two light poles on the north side of the stadium and the electrical conduit connection between them will be constructed in areas that were previously graded during construction of the football stadium. These previously graded areas do not support special status species. No construction activity will occur within or near the plant preservation areas. Therefore, the proposed project is not expected to impact special status plant species (i.e. Santa Clara Valley dudleya and Metcalf Canyon jewel flower) or sensitive natural communities (i.e. serpentine habitat).

Because the stadium lights will be angled down towards the ground, are located within a well lit urban area, and are less than 200 feet above grade, the proposed lighting will not result in a bird strike hazard<sup>7</sup>.

There are no riparian habitats, wetlands, or trees on or adjacent to the project site that will be affected by the proposed project. The project will not effect wildlife corridors or nurseries, or conflict with a habitat conservation plan.

#### Plant Preservation Area Fencing and Signage

During prior development of the school, a dudleya translocation area and two plant preservation areas were established on the approximate 62-acre school site (refer to Figure 13). A chain link fence was installed around the dudleya translocation area. The existing Planned Development Zoning for the Valley Christian School Site also requires that fencing and signage be placed around the plant preservation areas on the site for the purpose of protecting the plants. The placement of fencing and signage around the plant preservation areas was not completed. As stated in the letter from *Environmental Science Associates* (refer to Appendix C), annual plant monitoring on the site indicates that the plant preservation areas are undisturbed and that fencing is not needed. This conclusion is based on the location of the plant preservation areas on relatively steep, rocky, slopes that are not readily accessible. Therefore, project proposes to remove the existing PD Zoning requirement to install fencing and signage around the two existing plant preservation areas on the site. The fencing is considered unnecessary to preserve the plant health and would detract from the natural setting of the plant preservation areas.

# 3. <u>Conclusion</u>

As currently proposed, the project will not result in impacts to biological resources. (Less Than Significant Impact)

<sup>&</sup>lt;sup>7</sup> Personal Communication, Niall McCarten, Ph.D., Senior Biologist, Environmental Science Associates, May 20, 2003.

#### E. CULTURAL RESOURCES

# 1. <u>Setting</u>

An archeological survey of the school stadium and tennis court area was conducted in May 1998 by *Holman and Associates*. Previous archaeological surveys including literature reviews and field reconnaissance have also been conducted for other portions of the Valley Christian Schools site. These surveys revealed no indication of aboriginal use or occupation on the site.

# 2. Environmental Checklist and Discussion

CULTURAL RESOURCE	S						
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:					$\boxtimes$		8
<ol> <li>Cause a substantial adver in the significance of an l resource as defined in §1</li> <li>Cause a substantial adver in the significance of an archaeological resource a</li> </ol>	nistorical 5064.5? se change						8
§15064.5? 3) Directly or indirectly design.	rov a				$\square$		8
unique paleontological re	_	Ш	Ш	Ш		Ш	8
site, or unique geologic f  4) Disturb any human remaincluding those interred of formal cemeteries?	eature?						8

**Discussion:** Previous archaeological surveys have determined that cultural resources are not expected to occur on the site. In addition, development of the proposed project will only occur on previously graded soils. The proposed project, therefore, will not result in impacts to cultural resources.

#### 3. Conclusion

The proposed project will not result in impacts to cultural resources. (No Impact)

### F. GEOLOGY AND SOILS

The following discussion is based upon information contained in the Valley Christian School and South Valley Christian Church EIR (1992).

# 1. Setting

## **Topography**

The project site is located on an east-west trending ridge that rises steeply from the surrounding valley floor in southern San Jose. Elevations on the site range from approximately 195 to 350 feet above mean sea level. The original topography has been modified as a result of past mining and grading operations.

# **Geology and Soils**

The project site is underlain by serpentine rock of the Franciscan Complex. Serpentine rock can contain asbestiform minerals, including chrysotile and magnesite.

The site is located within a City of San Jose Geologic Hazard Zone.

### Seismicity

The project site is located in a seismically active part of northern California. Many faults exist in the southern San Francisco Bay Area and some of them are capable of producing ground motions that can affect the site. The closest large regional faults include the San Andreas, Hayward, and Calaveras faults. The San Andreas Fault, passes about 12 miles southwest of the site. The Hayward and Calaveras faults are located approximately 5 miles and 8 miles northeast of the site, respectively.

Soil liquefaction is a phenomenon in which saturated, cohesionless soils undergo a temporary loss of strength during earthquake ground shaking. The site consists of serpentine bedrock overlain by relatively shallow layers of soil materials. The potential for liquefaction on the site is anticipated to be very low.

Other seismically induced types of ground failure include differential compaction and lateral spreading. Differential compaction is the non-uniform compaction of soil strata, which results in movement of near-surface soils. The probability of such ground movement on the site is considered low. Lateral spreading occurs as a form of horizontal displacement of alluvial material toward an open or "free" face, such as a creek channel. As described above, the soil strata on the site are limited in depth. In addition, there are no creek channels crossing the site. Therefore differential compaction and lateral spreading are unlikely to affect the site.

# 2. Environmental Checklist and Discussion

GE	COLOGY AND SOILS						
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Wo	ould the project:						
1)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:  a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?  (Refer to Division of Mines and Geology Special Publication 42.)						6,8
	b) Strong seismic ground shaking?						6,8
	c) Seismic-related ground failure, including liquefaction?						6,8
2)	d) Landslides? Result in substantial soil erosion or the loss of topsoil?			$\boxtimes$			6,8 6,8
3)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?						6,8
4)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or						6,8
5)	property? Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?						1

**Discussion:** Valley Christian High School proposes to install stadium lights at the football/track stadium located on the eastern side of the campus. Lighting of the stadium will be accomplished with four light racks (two on each side of the stadium) that will be elevated above the field by poles and connected by underground electrical conduit. The lights will be installed in areas that were previously graded during construction of the

stadium. The light racks on the south side of the stadium will be mounted on each side of the existing bleachers. The northwesterly light pole will be located at grade with the playing field in an existing storage area. The northeasterly light pole will be located adjacent to the field at the base of an existing retaining wall.

### **Seismic Hazards**

Although no known earthquake faults cross the site, the project site is located within a City of San Jose Geologic Hazard Zone and the site is within the seismically active San Francisco Bay Area. Therefore, severe ground shaking is probable during the life of the project. These geologic hazards, however, will be avoided through the use of standard engineering and seismic safety design techniques.

### 3. Conclusion

The projects will not result in geologic or seismic hazards that cannot be avoided through the use of standard engineering design and seismic design techniques. (Less Than Significant Impact)

# G. HAZARDS AND HAZARDOUS MATERIALS

# 1. <u>Setting</u>

The site is underlain by serpentine rock. Serpentine rock may contain naturally occurring chrysotile asbestos. Asbestos exposure is known to cause disease in humans if the mineral fibers are reduced to dust and become airborne. No other hazardous conditions are known to exist on the site.

# 2. Environmental Checklist and Discussion

I	HA	ZARDS AND HAZARDOUS MA	TERIAL	S				
			Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Impact	No Impact	Beneficial Impact	Information Source(s)
	Wo	ould the project:						
	1)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?						1,2
	2)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?						1,2
	3)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile						6,8
	4)	of an existing or proposed school? Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the						6,8
	5)	public or the environment? For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in						1,7
	6)	the project area? For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?						1,7

HAZ	ZARDS AND HAZARDOUS MA	TERIAL	S				
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Wou	ald the project:						
l	Impair implementation of, or physically interfere with, an adopted emergency response plan						1
8) 1 s i	or emergency evacuation plan? Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?						1

**Discussion:** The project proposes to install four light racks, two on each side of the stadium. The lights will be installed in areas that were previously graded during the construction of the stadium. The two light racks on the south side of the stadium will be mounted on each side of the existing bleachers on areas previously graded and filled, and as a result, their installation will not disturb the native serpentine soils. The two light racks on the north side of the stadium will be constructed adjacent to the field on soils previously graded during construction of the stadium; however, they will require minimal additional grading. The grading may expose the workers and nearby sensitive receptors (i.e. school and residences) to asbestos-containing dust.

**Impact:** The proposed project will require minimal grading which may expose workers, students and nearby residences to naturally occurring asbestos in the serpentine soils.

**Mitigation and Avoidance:** In order to avoid the potentially significant hazards of disturbing the naturally occurring asbestos, the project will complete the following measures during the installation of the light poles on the north side of the stadium:

- The surface of active cut and fill areas shall be thoroughly watered during the day to reduce dust when these areas are not covered or stabilized.
- At the end of each workday, all exposed serpentinite material in the cut and fill areas shall be stabilized as necessary.

### 3. Conclusion

With the implementation of the mitigation measures described above, the proposed project will not result in significant hazardous materials impacts. (Less Than Significant Impact With Mitigation)

# H. HYDROLOGY AND WATER QUALITY

### 1. Setting

The project site is located on a hill above the floor of the Santa Clara Valley. The site is within the Coyote Creek watershed.

According to the Flood Insurance Rate Maps (FIRM) prepared by the U.S. Federal Emergency Management Agency, the project site is not located within any 100-year flood plains.

Stormwater from the stadium and the adjacent campus is collected on site and is piped to the public storm drainage system in Skyway Drive on the south side of the campus. Storm drainage from the remainder of the site is directed to Diamond Heights Drive or sheetflows to Senter Road, where it enters the existing public storm drainage system.

## 2. Environmental Checklist and Discussion

HY	DROLOGY AND WATER QUAL	ITY					
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Wo	uld the project:						
1)	Violate any water quality standards or waste discharge requirements?				$\boxtimes$		1,2
2)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the						1,2
	local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?						
3)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-						1
4)	or off-site? Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?						1

HY	DROLOGY AND WATER QUAL	ITY				
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	No Impact	Beneficial Impact	Information Source(s)
Wo	ould the project:					
5)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?					1,2
6)	Otherwise substantially degrade		$\boxtimes$			1
7)	water quality? Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other					1
8)	flood hazard delineation map? Place within a 100-year flood hazard area structures which would impede or redirect flood flows?					1
9)	Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of					1,2
10)	the failure of a levee or dam? Be subject to inundation by seiche, tsunami, or mudflow?			$\boxtimes$		1,2

### **Discussion:**

## **Construction Impacts**

Installation of the light racks will require minimal grading. The soil disturbance will increase the potential for erosion and sedimentation. Eroded soil contains nitrogen, phosphorus, and other nutrients. When carried into water bodies, these nutrients can trigger algal blooms, which reduce water clarity, deplete oxygen, and create odors.

**Impact:** Project construction may result in impacts to stormwater runoff quality.

**Mitigation and Avoidance:** The project will implement the following best management practices (BMP's) during construction to limit runoff contaminants from entering the stormwater:

- Provide temporary cover of all disturbed surfaces to help control erosion during construction; and
- Provide permanent cover as soon as is practical to stabilize the disturbed surfaces after construction has been completed.

### **Unpaved Parking Lot Impact**

The unpaved church building pad site may be used for overflow parking. There is the potential that parking on the unpaved lot could result in mud and dirt being tracked onto the streets and other paved surfaces. During a storm event, the soil on the streets and other paved surfaces would enter the storm drain system and could affect water quality.

**Impact:** Overflow parking on the unpaved lot may result in impacts to stormwater runoff quality.

**Mitigation and Avoidance:** The project will implement the following mitigation measure to reduce potential water quality impacts resulting from parking on the unpaved lot:

• Gravel will be placed over the church building pad site.

### 3. Conclusion

With the implementation of the mitigation measures above, the proposed project will not result in significant hydrology or water quality impacts. (Less Than Significant Impact With Mitigation)

### I. LAND USE

### 1. <u>Setting</u>

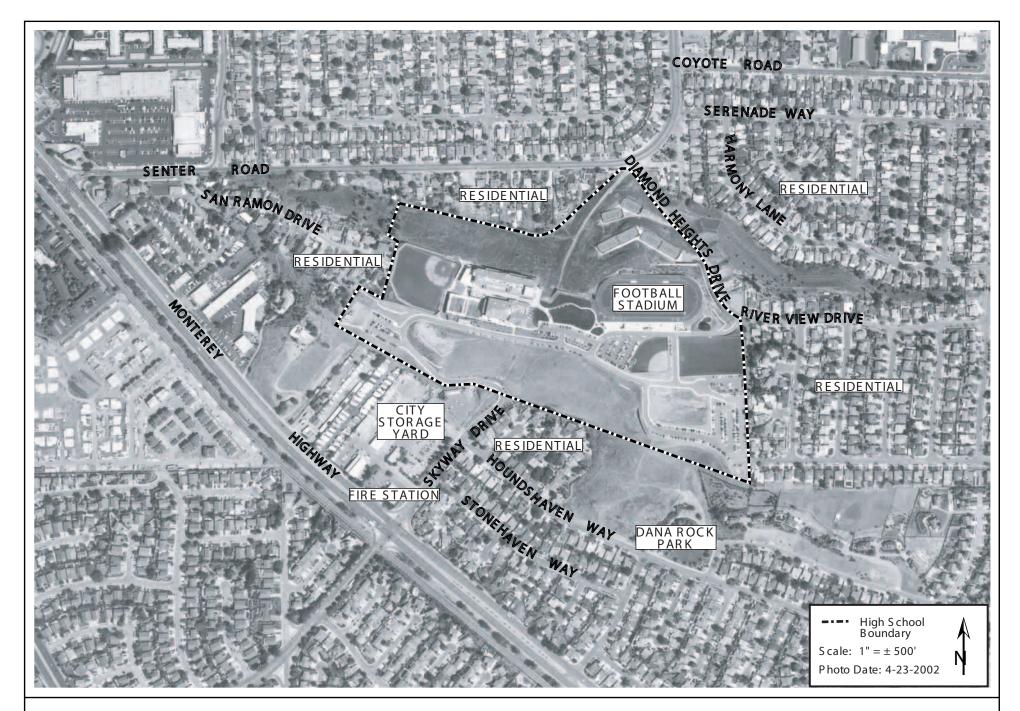
The Valley Christian School site is developed with classrooms and ancillary uses such as a gymnasium, playing fields, parking lots, tennis courts and the football stadium. Large areas of the campus are also undeveloped. Portions of these undeveloped areas have been set aside as plant preservation areas (refer to Section IV., D., Biology). The campus is primarily surrounded by residential land uses. Other land uses near the campus include a City of San José Storage Yard, City of San José Fire Station, and Dana Rock Park. The football stadium is located on the eastern side of the campus. The nearest land uses to the football stadium are residences located approximately 350 feet east of the football field at the end of Riverview Drive. Directly adjacent the football stadium to the north, east, south, and west is the Valley Christian School campus. An aerial photograph of the project site and the surrounding land uses is shown on Figure 14.

## 2. Environmental Checklist and Discussion

LA	ND USE						
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Wo	ould the project:						
1)	Physically divide an established community?						1,2
2)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?						1,2,4
3)	Conflict with any applicable habitat conservation plan or natural community conservation plan?						1,2

**Discussion:** The proposed project consists of improvements to an existing stadium, within an existing high school. Therefore, the proposed project will not physically divide an existing community. The proposed project is consistent with applicable land use plans and policies, including the City of San José General Plan and Zoning Ordinance. Construction of the proposed project will not disturb the established plant preservation areas on the site and will not conflict with any applicable habitat conservation plan or community conservation plan.

In an effort to provide added privacy to the five residences with backyards along Skyway Drive between Houndshaven Way and the southern boundary of the campus, the project includes the construction of a seven-foot masonry soundwall along the northern property line of the residences. The location of the soundwall is shown on Figure 2. The wall is not



required as mitigation for any environmental impact and will only be constructed with prior approval and authorization of the landowners.

# 3. Conclusion

The proposed project will be consistent with applicable land use plans and policies and will not result in any significant land use impacts. (Less Than Significant Impact)

# J. MINERAL RESOURCES

# 1. <u>Setting</u>

The project site is in the middle of a developed urban area. It does not contain any known or designated mineral resources.

## 2. Environmental Checklist and Discussion

MI	NERAL RESOURCES						
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Wo	ould the project:						
1)	Result in the loss of availability of a known mineral resource that would be of value to the region and the						2
2)	residents of the state? Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?						2

# 3. <u>Conclusion</u>

The project will not result in a significant impact from the loss of availability of a known mineral resource. (No Impact)

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### K. NOISE

The following discussion is based upon the noise study prepared for this project in November 2002 by *Illingworth & Rodkin, Inc.* Noise measurements were conducted to determine ambient noise levels at the residences nearest the stadium. Projected noise levels from a typical Valley Christian football game are based on noise measurements of a Valley Christian High School evening varsity football game at Townsend Field in September 1998, an evening varsity football game at Mt. Pleasant High School in September 2002, and a Saturday afternoon junior varsity and varsity football game played at Santa Teresa High School in September 2002. Projected noise levels from project generated traffic are based upon the traffic and parking analysis prepared for the proposed project by *Fehr and Peers, Inc.* The acoustical terms commonly referred to in this section are defined in the noise study, included as Appendix D of this Initial Study.

### 1. Setting

### City of San José Noise Element

The Noise Element of the City of San Jose's 2020 Plan identifies noise and land use compatibility standards for various land uses. The City's goal is to "minimize the impact of noise on people through noise reduction and suppression techniques, and through appropriate land use policies." The City's acceptable noise level objectives for residential land uses are 55 dBA  $L_{dn}$  as the long-range exterior noise quality level and 60 dBA  $L_{dn}$  as the short-range exterior noise quality level. Policy 9 requires that construction operations should use available noise suppression devices and techniques. Policy 11 establishes an impact threshold of 55 dBA  $L_{dn}$  for non-residential projects proposed adjacent to residences.

# **Existing Noise Environment**

The existing residences potentially most affected by noise from the project are located to the east of the stadium, approximately 450 feet from the edge of the existing bleachers on the south side of the field. Noise measurements were taken along the eastern boundary of the school at the residences nearest the stadium and the residences adjacent to the parking lot to determine ambient noise levels. The results of the noise measurements indicate that existing ambient noise levels are above  $60~\mathrm{dBA}~\mathrm{L}_{\mathrm{dn}}$ .

 $<sup>^{8}</sup>$  L<sub>dn</sub> is the average noise level furing a 24-hour day, obtained after the addition of 10 decibels to levels measured in the evening between 10:00 p.m. and 7:00 a.m.

### 2. Environmental Checklist and Discussion

NO	DISE						
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Wo	ould the project result in:						
1)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable						9
2)	standards of other agencies? Exposure of persons to, or generation of, excessive groundborne vibration or						9
3)	groundborne noise levels? A substantial permanent increase in ambient noise levels in the project vicinity above levels existing						9
4)	without the project? A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?						9
5)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to						9
6)	excessive noise levels? For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?						9

### **Discussion:**

### **Stadium Noise**

Activity at the football stadium will generate noise that will be intermittently audible at residences in the project area. The nearest existing residence is east of the football stadium at the end of Riverview Drive, which is located down a hill about 450 feet from the edge of the stadium's spectator stands (350 feet from the edge of the football field). The orientation of the stands to the north and the acoustical shielding afforded by the differential in elevation provide at least 10 dBA of noise reduction in addition to the noise reduction from the distance. It is anticipated that hourly average noise levels generated exclusively by events at the football stadium could reach 57 dBA  $L_{eq}$  at the nearest residences during a stadium capacity game<sup>9</sup>. This average noise level will be sustained for a period up to about four hours

<sup>&</sup>lt;sup>9</sup> L<sub>eq</sub> is the average noise level during the measurement period.

in duration. The maximum instantaneous noise levels during this same time period could reach 70 dBA, resulting from the various activities such as cheering crowds, marching bands, the public address (PA) system, whistles, etc.

The day/night average noise level ( $L_{dn}$ ) generated by football games will be less than 50 dBA at the nearest residence. Because existing ambient ( $L_{dn}$ ) noise levels are greater than 60 dBA, there will be no measurable change in the  $L_{dn}$  resulting from football stadium noise. Hourly average noise levels during the evening stadium events will be up to five dBA above existing hourly average noise levels measured at the nearest residence. This increase will be noticeable, but is not substantial and will not cause a significant noise impact. The maximum instantaneous noise levels during events at the stadium will be intermittently audible, but will fall within the range of existing ambient noise levels measured at the nearest neighbors in June 2002.

Other special events may also occur at the stadium. Such events might include graduation ceremonies or other sporting events, such as soccer. The most significant source of noise at such events is the PA system and cheering crowds. As described above, while intermittently audible, the sound of amplified speech and cheering at the nearest neighboring properties will fall within the range of existing ambient noise levels. Therefore, stadium activities are not expected to result in a significant noise impact.

### **Traffic Noise**

Vehicular traffic will access the campus via Skyway Drive for the proposed evening events. Traffic is expected to gradually enter the facility over several hours beginning at about 5:00 p.m. with most people having arrived in time for the varsity football game. The school currently has 543 on-site parking spaces. Additional parking areas are currently being developed and temporary overflow parking is available on the site of the future church. Including the parking areas under development and the temporary church parking site, there will be a total of 731 parking spaces on the site. For a capacity game (3,500 attendance), the traffic analysis conducted for the proposed project counted 603 vehicles trips in the hour before the game and 800 vehicles trips in the hour after the game is over. These traffic counts included the effects of traffic reduction measures including shuttle buses. The predicted hourly average noise level (L<sub>eq</sub>) along Skyway Drive for a capacity event is 63 dBA at a distance of 30 feet from the roadway centerline. This assumes that 10 percent of the vehicle trips would be shuttle buses. The traffic will elevate noise levels at residences adjacent to Skyway during the hours when traffic arrives at and leaves the site. The maximum L<sub>dn</sub> noise levels due to project traffic will be 52-54 dBA along Skyway Drive. Activity in the parking lot will similarly be expected to temporarily elevate noise levels at the residences that border the parking lot. Because it is expected that such noise levels will only occur for two hours per evening and will be limited to 15 times per year, the increase is considered to be less than substantial and the impact less than significant.

### 3. <u>Conclusion</u>

The proposed project will not result in the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance. Since the noise from the proposed project will be limited in frequency and duration, it is not considered substantial. For these reasons, the proposed project is not expected to result in a significant noise impact. (Less Than Significant Impact)

# L. POPULATION AND HOUSING

### 1. Setting

According to the Association of Bay Area Governments (ABAG) the City of San José's population for 2000 was 894,943 with 276,598 households. For 2020 the projected population is 1,069,200 and 334,700 households.

# 2. Environmental Checklist and Discussion

POPULATION AND HOUSING						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
Induce substantial population growth in an area, either directly (for example, by proposing new homes						1
and businesses) or indirectly (for example, through extension of roads or other infrastructure)?						
Displace substantial numbers of existing housing, necessitating the construction of replacement						1
housing elsewhere?  3) Displace substantial numbers of people, necessitating the construction of replacement housing				$\boxtimes$		1
elsewhere?						

**Discussion:** The proposed project will not induce population or job growth or displace either housing or persons.

### 3. Conclusion

The proposed project will not result in impacts on population and housing in the City or region. (No Impact)

#### M. **PUBLIC SERVICES**

#### 1. Setting

Fire protection is provided to the project site by the City of San José Fire Department. First response to an emergency at the project site will be from Station #18, located at the corner of Skyway Drive and Monterey Highway. The response time for Station 18 is three and onehalf minutes and will include an engine and a truck. The second responding engine to the site will be from Station 26, located at 5200 Tully Road. The response time for Engine 26 will be six minutes.

Police service is provided to the project site by the City of San José Police Department. Police officers patrolling the project area are dispatched from police headquarters located at 201 West Mission Street.

#### 2. **Environmental Checklist and Discussion**

PUBLIC SERVICES						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:						
Fire Protection? Police Protection? Schools? Parks? Other Public Facilities?						1 1 1 1 1

Discussion: The existing stadium currently hosts capacity events and the San Jose Fire Department and Police Department currently provide service to the site. The proposed project will not substantially increase the number of events at the proposed stadium. The hosting of night events, therefore, will not substantially increase demand for police and fire services, and will not increase existing response times to the project site. The proposed project will not result in the increased demand for schools, parks, or any other public facilities in the project area. As stated in the project description, the project includes the installation of battery operated fluorescent lights on the light poles to provide light in the

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event of a power outage This will allow spectators to safely exit the stadium in the event of a power outage.

# 3. Conclusion

The proposed project will not result in any significant impacts on the physical environment as a result of the increased demand for fire protection, police protection, schools, parks, and other public facilities. (Less Than Significant Impact)

# N. RECREATION

## 1. Setting

The existing stadium on the project site is comprised of an astro-turf football field and rubberized track with permanent bleachers and locker room facilities on the southern side and portable bleachers on the northern side.

# 2. Environmental Checklist and Discussion

DECDEATION						
RECREATION						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:		_			_	
1) Increase the use of existing					$\boxtimes$	1
neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?						
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse						1
physical effect on the environment?						

**Discussion:** Valley Christian High School currently plays evening football games at Townsend Field in Santa Clara. The proposed project will allow evening games to be played on campus, thereby lessening the burden on Townsend Field and other recreational facilities in the area. The proposed project will not result in a physical impact on the environment due to the expansion or construction of recreational facilities.

### 3. Conclusion

The proposed project will result in beneficial impacts to recreational facilities in the area. (Beneficial Impact)

### O. TRANSPORTATION

The following discussion is based on a traffic and parking analysis conducted for the proposed project in October 2002 by *Fehr & Peers Associates, Inc.* The analysis is included as Appendix E of this report.

### 1. Setting

### **Roadway Network and Vehicular Site Access**

Direct access to Valley Christian High School is provided by a private extension of Skyway Drive on the eastern side of Monterey Road.

**Skyway Drive** is an east-west roadway that extends westward from the school site to Snell Avenue. Skyway Drive has two travel lanes between Monterey Road and the school site. *No Stopping Anytime* signs are posted along Skyway Drive east of its intersection with Monterey Road

*Monterey Road* is a north-south major roadway that extends from downtown San Jose to Morgan Hill and Gilroy to the south. It has six travel lanes (three in each direction) and bike lanes near the school site. Major roadways in the project area that cross Monterey Road include Capitol Expressway and Blossom Hill Road, where there are grade separations due to the adjacent railroad tracks. Most intersections on Monterey Road are signalized or restricted to right-turns only.

# Transit, Bicycle and Pedestrian Site Access

In addition to access by automobile, site access is also provided via walking, bicycle, and transit. Sidewalks are provided along the south side of Skyway Drive and on the east side of Monterey Road. Crosswalks and pedestrian signals are provided at the signalized intersection of Monterey Road and Skyway Drive. Bicycle facilities near the site include bike lanes on Monterey Road.

No direct transit service is provided to the site. Several transit routes operate along Monterey Road. Bus and light rail service in Santa Clara County is provided by the Santa Clara Valley Transportation Authority (VTA). VTA Routes 37, 38, 66, 68, 72, and 73 operate along Monterey Road with four (4) bus stops located at the intersection of Skyway Drive and Monterey Road. These routes provide service to the Capitol LRT station, the Diridon Station, downtown San Jose, Gilroy, and Milpitas.

### **Existing Skyway Drive/Monterey Road Intersection Operations**

In order to determine the existing operating condition at the intersection of Skyway Drive and Monterey Road, manual turning movement counts were conducted on Friday, October 11, 2002 from 4:00 p.m. to 8:00 p.m.. This is the time period when vehicles would be entering the stadium before a nighttime event<sup>10</sup>.

<sup>&</sup>lt;sup>10</sup> Junior varsity games will start at 5:00 p.m. and varsity games will start at 7:30 p.m.

Intersection operations were evaluated with level of service calculations. Level of Service (LOS) is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, the best operating conditions, to LOS F, or the worst operating conditions. LOS E represents "at-capacity" operations. When volumes exceed capacity, stop-and-go conditions result, and operations are designated as LOS F.

The level of service methodology approved by the City of San Jose and the Valley Transportation Authority (VTA) evaluates a signalized intersection's operation based on the average stopped vehicular delay. The average stopped delay is calculated using TRAFFIX analysis software and is correlated to a level of service designation as shown in Table A-1 in Appendix E. The City of San Jose level of service standard is LOS D.

The existing volumes were used with the existing lane configurations and signal phasings/timings as inputs to the LOS calculation method to evaluate the current operation of the key intersection for a Friday night. The intersection of Monterey Road/Skyway Drive is currently operating at LOS B, a good operating level during this time period. The level of service calculation sheet is provided in Appendix E.

### **Parking**

The school site currently has 543 parking spaces on-site, including employee spaces, student parking spaces, other designated parking spaces (i.e. handicapped, visitors, board members, etc.), and church spaces<sup>11</sup>. The existing dirt lot for the future church building pad currently can park approximately 120 vehicles. Additional parking areas are currently being developed, including a 28 space parking lot and an outdoor basketball court/overflow parking area that can accommodate approximately 40 vehicles. Including the parking areas under development and the temporary church parking site, there will be a total of 731 parking spaces on the site.

### **Traffic and Parking Management Program**

Valley Christian Schools currently implements a traffic and parking management program to reduce traffic and parking congestion at the school site. This program includes use of off-site parking lots with shuttle bus service to the campus, an outreach program to encourage people to use the off-site lots and shuttle system, a changeable message sign, and on-site traffic control personnel.

The school typically uses the Capitol park-n-ride lot, located at Fehren Road and Monterey Road, for off-site parking and two buses to shuttle people to the campus during events. Valley Christian Schools has an existing agreement with the Valley Transportation Authority (VTA) to use the park-n-ride lot. In the event that the park-n-ride lot unavailable or additional parking is necessary, the shuttle-system can be expanded to include other off-site lots that have over a thousand parking spaces. The other off-site parking lots include, but are not limited to, the Blossom Hill Road/State Route 85 park-n-ride lot, the Capitol Expressway/State Route 87 park-n-ride lot, and the Monterey Highway/Ford Road park-n-

<sup>&</sup>lt;sup>11</sup> Although the church has not been constructed, the parking spaces have been constructed. The existing zoning for the Valley Christian School site does not allow for the school and the church to conduct simultaneous events; therefore, the church parking lot will be available for use during stadium events.

ride lot. VCS has two additional full-size school buses that can be added to shuttle attendees into the site.

The outreach program includes: (1) daily announcements read in the student bulletin, (2) a map and announcement provided to the opposing school (for an athletic event), (3) a letter to alumni parents (for homecoming games), (4) a posted notice on the school's website, (5) a newsletter mailed to parents, and (6) an email message to all Valley Christian staff and teachers. Flyers are also distributed to nearby residences to inform them of stadium events. A temporary changeable message sign is placed on Skyway Drive, just east of Monterey Road. Its message in the morning before football games is, "Please, no football parking on side streets."

Traffic operations officers are hired from the City of San Jose to direct traffic on-site. Valley Christian School supplements the traffic operations officers with four to five staff members.

### **Trip Reduction Plan**

As a condition of approval for prior development on the Valley Christian campus, the City of San Jose required a Trip Reduction Program (TRP) to reduce the number of a.m. peak hour trips accessing the Valley Christian School campus. This condition was not required as mitigation for a significant environmental impact, but rather to further reduce the effect of the school site on the surrounding neighborhood. The condition of approval reads, "The applicant shall submit to the Director of Planning a Trip Reduction Program designated to achieve a 15 percent reduction in a.m. peak hour trips. This program may include carpooling, van-pooling, busing or other measures to reduce a.m. peak hour trips and shall include baseline measurements and a monitoring program."

# 2. <u>Environmental Checklist and Discussion</u>

TRANSPORTATION/TRAFFIC						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?						13,15
2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?						13,15

TR	TRANSPORTATION/TRAFFIC						
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated		No Impact	Beneficial Impact	Information Source(s)
Would the project:							
3)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?						1
4)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?						1
5)	Result in inadequate emergency access?				$\boxtimes$		1,13
6)	Result in inadequate parking capacity?						13
7)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?						13

**Discussion:** A traffic and parking analysis was conducted to identify the impacts of a stadium-capacity evening event allowed by the proposed stadium lighting project on the transportation and parking system in the vicinity of the site.

### **Project Traffic Estimates**

Traffic counts were conducted at the Valley Christian School to measure the amount of traffic generated by people participating in and attending a football game. The results of the counts were used to estimate traffic volumes before and after nighttime stadium events. The counts were conducted on Saturday, October 5, 2002, when Valley Christian High School had their homecoming game against Bellarmine Academy. The attendance at this game, including people associated with the homecoming activities, is estimated to be 3,500 people. Therefore, it represents an at-capacity (worst case) event. In addition to the counts, observations were made on and off the campus to evaluate the effectiveness of the traffic and parking management plan and traffic operations on Monterey Road and Skyway Drive. The count results are included in Appendix E of this Initial Study.

Traffic steadily entered and exited the campus throughout the day, with many people arriving early for the varsity game and/or to watch the junior varsity game. During the one-hour period before the varsity game, 327 vehicles entered and 276 vehicles exited the campus. During the one-hour period after the varsity game, 108 vehicles entered and 692 vehicles exited the campus.

The traffic and parking management program was implemented on the day of the Homecoming game. The number of people using the two shuttle buses between the park-n-ride lot and the campus were recorded. The results are included in Appendix E of this Initial Study. A total of 950 event attendees (or approximately 475 each way) were on the shuttle

buses. A total of 31 trips were made by the shuttle buses to take attendees to and from the park-n-ride lot. Assuming an average occupancy of 2.5 people per vehicle, this would correspond to 190 vehicles that would otherwise be parked on-campus.

Several visits were made during the morning and early afternoon on October 5 to observe traffic operations on Monterey Road and on Skyway Drive during "before game" conditions. Traffic was observed to be moving smoothly. Minimal queuing was observed at the intersection of Monterey Road and Skyway Drive.

## **Intersection Operations**

The proportion of school traffic approaching/departing the site from each major direction was estimated based on the relative locations of the existing students' residences: 20 percent to/from the north on Monterey Road, 15 percent to/from the east on Capitol Expressway and Hellyer Avenue, 35 percent to/from the south on Monterey Road, and 30 percent from the west on Skyway Drive.

The before-game traffic volumes were added to the existing Friday night traffic volumes between 6:30 pm and 7:30 pm to estimate intersection volumes during a capacity evening event at the stadium. Intersection level of service calculations were conducted to evaluate the potential impacts of an evening stadium-capacity event on the Monterey Road/Skyway Drive intersection. The results indicate that the addition of project traffic will cause increases in delays at the Monterey Road/Skyway Drive intersection. The intersection is projected to operate at LOS C during the one-hour period before a Friday night game. This is an acceptable level according to the City's level of service standard.

### **Intersection Queuing**

The maximum queue of vehicles waiting to turn left from southbound Monterey Road to eastbound Skyway Drive was obtained from the level of service calculation sheets. The existing queue is four vehicles. The projected maximum queue with a peak football game is estimated to be nine vehicles. The existing left-turn pocket is approximately 200 feet long and can accommodate eight vehicles plus a vehicle in the transition area. Therefore, the existing left-turn pocket is long enough to accommodate the projected maximum queue and vehicles are not anticipated to extend out of the pocket into the adjacent through lane.

Currently, plans to create a second left turn lane from southbound Monterey Road to eastbound Skyway Drive have been submitted to the California Department of Transportation. Once constructed, the second left turn lane will provide further assurance that vehicle queuing will not extend into the adjacent through lane.

### **Parking Analysis**

During the football game on October 5, vehicles were parked in the 543 on-site parking spaces, on the dirt lot soon to be used for the basketball court (40 vehicles), and on the church building pad (120 vehicles). In addition, approximately 190 vehicles were parked in the park-n-ride lot (the shuttle riders). The total parking demand, representing the parking demand for an at-capacity event, is approximately 900 vehicles. The existing on-site parking supply plus the combination of the off-site spaces and the shuttle buses are sufficient to accommodate peak stadium events.

The following measures are included in the proposed project to avoid the possibility of parking impacts occurring:

- The applicant will implement the shuttle program to and from nearby Park-n-Ride lots for all evening events at the stadium.
- Valley Christian Schools will implement their Traffic and Parking Management Plan outreach program before all evening stadium events.
- City of San José traffic operations officers will be hired for large events.
- Carpooling will be encouraged for all evening events.
- In accordance with the existing zoning for the school site, Valley Christian Schools will construct a gate and fence to prevent parking on Diamond Heights Drive.

The potential future development of a church on one of the overflow dirt lots will result in the loss of 120 parking spaces, which will reduce the number of on-site parking spaces to 611. With the proposed implementation of the shuttle program for all evening events, the loss of 120 dirt lot parking spaces is not expected to result in a significant impact on parking supplies.

The project will not result in inadequate emergency access or change air traffic patterns. The project will not increase roadway hazards due to design features.

## **Trip Reduction Plan**

The project proposes to have the 15 percent trip reduction condition removed and implement a revised TRP. Valley Christian School has implemented and enforced various trip reduction measures since implementation of the TRP prepared in May 2002. Monitoring of the trip reduction efforts has shown a year to year (and even month to month) variation in the trip reduction achieved at the school, with the results ranging from 2.4 to 9.5 percent reduction in a.m. trips. It is the professional opinion of the consulting traffic engineer that it is unlikely that a 15 percent reduction in a.m. peak hour trips can be achieved<sup>12</sup>. In addition, public use of the campus swimming pool on weekday mornings has increased, further increasing nonschool related trips. Therefore, a revised TRP has been prepared to fulfill the condition of approval stated above and is included as Appendix F of this Initial Study. This program will hold Valley Christian accountable to the City of San Jose for providing programs that will reduce the number of trips accessing the campus from Skyway Drive during the morning peak hour and will continue to be monitored on a yearly basis to the satisfaction of the Director of Planning, Building, and Code Enforcement and the Director of Public Works. Because the condition of approval was not required to mitigate any significant impacts, removing this condition of approval will not result in a significant impact<sup>13</sup>. The measures included in the program are described below.

1

<sup>&</sup>lt;sup>12</sup> Fehr & Peers Associates, Inc, Transportation Consultants, Valley Christian Schools Trip Reduction Program Skyway Campus, May 2004.

<sup>&</sup>lt;sup>13</sup> Personal Communication, Jason Nesdahl, Transportation Engineer, Fehr & Peers Associates, June 9, 2004.

## Transportation Coordinator and Carpool Matching Program

Valley Christian Schools will continue to provide a transportation coordinator that will implement all trip reduction programs. The transportation coordinator oversees the program, organizes the carpool-matching program, attends at least four school functions (i.e. Back-to-School night, Parents night, etc.) per year to promote trip reduction measures, and develops program marketing materials (new student packets, flyers, etc.). The coordinator is responsible for contacting all parents and students about carpooling, matching them with other interested parties who reside nearby and have similar schedules, and follow up with them to ensure that carpools are formed or that new partners are found. The coordinator also is responsible for the shuttle program and enrolling students on the shuttle.

### Promotional Material

Flyers will continue to be distributed to parents and students at the beginning of the school year and additionally at least two more times throughout the year. The flyers encourage parents and students to reduce the number of trips accessing the school by riding the school shuttle and carpooling. Those interested in carpooling will be directed to use the school's website (www.valleychristian.net) to locate families in the same zip code. This material will also be distributed at school functions that the transportation coordinator attends.

### Preferential Carpool Parking Spaces

Valley Christian Schools will continue to provide 30 designated parking spaces for use by students driving authorized carpool vehicles. These spaces will be located in a desirable location (Lot F) for student parking and will be identified via special parking permits and signage.

### Off-Site Park-n-Ride and Shuttle Service

Valley Christian School provides a shuttle service that serves the park-n-ride lots located at the Capitol Light Rail Station, the Monterey CalTrain Station, and Valley Christian Elementary School located on Leigh Avenue. A total of four routes will be made during the morning peak hours.

To further encourage increased enrollment in the shuttle program, this program will be provided to students at no charge. In addition, a school vehicle will be provided as a shuttle that can be utilized throughout the school day for staff and faculty to encourage participation in the shuttle program. The "mini" shuttle would allow staff and faculty to access their vehicles at various times of the day while parking off-site and reducing the number of trips accessing the school. A designated driver will be provided to ensure that access is available to the faculty and staff.

### Staggering of Start Times

The school will implement an A-B schedule for the high school that will require half the students to arrive at 7:40 am and the other half to arrive at 9:05 am. The junior high school will still begin at 8:20 am. This staggering of start times helps spread the number of vehicles entering and exiting the school over a longer time period, thereby reducing the number of vehicles travel during the a.m. peak hour period. This measure is expected to have the greatest benefit in reducing the number of a.m. period trips. It should be noted that the

school reserves the right to further adjust the start times of the schools, as their need may change in the future.

### **Before-School Programs**

Junior high school students who arrive to school early are required to attend Early Bird Study Hall. In addition, food services are provided 30 minutes and 20 minutes prior to first period for high school and junior high school students, respectively. The school library is also open before school starts for high school students. This will allow parents with children in junior high school and high school to drop off all their children at once, instead of making multiple trips.

### Financial Incentives

Valley Christian Schools will require students/faculty/staff to purchase a \$180 parking permit to park a vehicle on campus. As a financial incentive to reduce the number of vehicles at the campus, this fee will be reduced to \$40 if the student/faculty/staff is driving in an authorized carpool with one other student/faculty/staff. This fee will be waived if more than one other student participates in this carpool.

#### 3. Conclusion

As currently proposed, the lighting of the football stadium at Valley Christian High School project is not expected to result in a significant transportation or parking impact. (Less Than **Significant Impact With Mitigation Measures**)

# P. UTILITIES AND SERVICE SYSTEMS

# 1. <u>Setting</u>

Utilities including electricity, natural gas, water, sanitary sewer, and solid waste service are currently provided to the project site.

# 2. Environmental Checklist and Discussion

UTILITIES AND SERVICE SYSTEMS							
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:							
1)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?						1,2
2)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?						1,2
3)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant						1,2
4)	environmental effects? Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?						1,2
5)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's						1
6)	existing commitments?  Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste dispased peeds?						1,2
7)	waste disposal needs? Comply with federal, state, and local statutes and regulations related to solid waste?						1,2

The proposed project will not exceed the capacity of existing utility systems or require the construction of new facilities that could have significant environmental effects.

#### 3. Conclusion

The proposed project will not in impacts to utility and service systems. (Less Than Significant Impact)

September 2004

Q.	Q. MANDATORY FINDINGS OF SIGNIFICANCE							
		Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)	
1)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?						1,6,8	
2)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?						1,2	
3)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?						1,2,3,4,5,6,7, 8,9,10,11,12, 13,14,15	

**Discussion:** The stadium lighting project is proposed at an existing stadium within an existing high school. While special status plant species are known to exist on the project site, the proposed project will only occur on developed land and areas that were previously graded during construction of the stadium. Therefore the proposed project is not expected to result in biological impacts. As described in their respective sections, the project has the potential to result in Aesthetics, Air Quality, Hazardous Materials, and Water Quality impacts. Mitigation measures have been provided in this Initial Study to reduce all potential impacts of the proposed project to less than significant level.

### **Checklist Sources**

- 1. CEQA Guidelines Environmental Thresholds (Professional judgement and expertise and review of project plans)
- 2. 2020 General Plan, City of San José
- 3. Santa Clara County Important Farmlands Map, 2000.
- 4. City of San José Zoning Ordinance
- 5. Bay Area Air Quality Management District CEQA Guidelines, 2001.
- 6. City of San José, *Valley Christian School and South Valley Christian Church EIR*, 1992
- 7. Airport Land Use Commission, *Land Use Plan for Areas Surrounding Santa Clara County Airports*, September 1992.
- 8. City of San José, Valley Christian Schools Athletic Fields and Courts Initial Study, March 1999.
- 9. Illingworth and Rodkin, *Valley Christian High School Football Stadium Lighting Project Environmental Noise Assessment*, November 2002.
- 10. Athletic Recreation Services, *Lighting Proposal for Football Field/Track Valley Christian High School*, April 2004.
- 12. Athletic Recreation Services, *Project Spill Light at 200-foot Perimeter*, April 2004.
- 13. Fehr & Peers Associates, Valley Christian High School Stadium Lighting Traffic and Parking Analysis, October 2002.
- 14. Environmental Science Associates, *Letter Regarding Fencing of Rare Plant Areas*, April 1, 2002.
- 15. Fehr & Peers Associates, *Valley Christian Schools Trip Reduction Program*, May 2004.

## V. REFERENCES

- Airport Land Use Commission, Land Use Plan for Areas Surrounding Santa Clara County Airports, September 1992.
- Illuminating Engineering Society of North America, *Recommended Practice for Sports and Recreational Lighting*, 2001.
- Athletic Recreation Services, *Lighting Proposal for Football Field/Track Valley Christian High School*, April 2004.
- Athletic Recreation Services, Project Spill Light at 200-foot Perimeter, April 2004.
- Bay Area Air Quality Management District, California Environmental Quality Act Guidelines, 1999.
- City of San José, 2020 General Plan.
- City of San José. Addendum to the Environmental Impact Report for the Valley Christian School and South Valley Christian Church EIR. 1992.
- City of San José, *Application for Environmental Clearance/Initial Study for 308 Diamond Heights Project*, August 1998.
- City of San José. Valley Christian School and South Valley Christian Church EIR. 1992.
- City of San José, Valley Christian Schools Athletic Fields and Courts Initial Study, March 1999.
- City of San José, Zoning Ordinance.
- Environmental Science Associates, Letter Regarding Fencing of Rare Plant Areas, April 1, 2002
- Fehr & Peers Associates, Valley Christian High School Stadium Lighting Traffic and Parking Analysis, October 2002.
- Fehr & Peers Associates, *Draft Valley Christian Schools Trip Reduction Progam Skyway Campus*, May 2004.
- Illingworth and Rodkin, Valley Christian High School Football Stadium Lighting Project Environmental Noise Assessment, November 2002.
- USDA-Soil Conservation Service, Santa Clara County Important Farmlands Map, 2000.
- USDA-Soil Conservation Service. 1968. Soils of Santa Clara County.

# VI. AUTHORS AND CONSULTANTS

Authors: City of San José

Akoni Danielsen, Principal Planner Jeff Roche, Planer II/Project Manager

Consultants: David J. Powers & Associates

Judy Shanley, Principal

Demetri Loukas, Project Manager Stephanie Grotton, Graphic Artist

**Athletic Recreation Services** 

Lighting Consultants Los Gatos, CA

Fehr & Peer Associates, Inc.

**Transportation Consultants** 

San José, CA

Illingworth & Rodkin, Inc.

**Acoustical Consultants** 

Petaluma, CA